

# FACT SHEET FOR PUBLIC OFFICIALS

Re-Occupation to Areas Affected by Storm Surge and Weathered Oil

### **PURPOSE**

This document outlines the roles and responsibilities of the Louisiana Department of Environmental Quality (DEQ) and the Louisiana Department of Health and Hospitals (DHH) during Hurricane Season 2010, specifically as it relates to the re-occupation of evacuees whose neighborhoods may have been affected by the storm surge and weathered oil.

### **ASSUMPTIONS**

- 1. The scope and scale of the event must be kept in perspective of available resources. State agencies will coordinate priorities for assessment(s) with the parish, and priorities will be determined based on need and demand.
- 2. Assessments will focus on residential areas and subdivisions as a whole, not on individual houses. Therefore, advisories will address preventive measures that individuals can take to mitigate exposure during clean-up based on how extensive oil presence is in a specific neighborhood.
- 3. Although this document addresses storm surge and oil, the higher health risks are a result of contamination by sewerage and debris in roads. The presence of oil in flood waters should not be the major barrier to reopening an evacuated area.
- 4. The following variables should be considered when determining whether an impacted area is suitable for re-occupation: Sewage, Water, Energy/Electricity, Air Quality, Trash/Debris, Medical, Security and Communications (SWEAT-MSC). DEQ monitors outdoor air and wastewater treatment systems and DHH monitors PUBLIC water systems. Electricity, Trash/Debris, Communications, and Security are evaluated by local governments and responders post-storm. Medical infrastructure should be considered a key priority to assist with increased medical needs due to injuries associated with clean-up.
- 5. Both DEQ and DHH will provide information on air quality, as well as updated boil advisories for water systems.

## LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

### **PREPARATIONS**

Prior to June 1st all DEQ equipment is checked to ensure ready for emergency use/response. Regional liaisons contact/meet State Police, parish office of emergency preparedness officials and others to review landfall preparations, waste site approvals, resolve other issues or concerns.

**Hurricane Alert** – Weather Service predicts potential for Louisiana impact – approx. 5 days prior to possible landfall, emergency response and field staff in regions are notified to be on ready alert.

Staff prepares, with state EOC, for activation of Emergency Operations Center. Regional liaisons communicate with LSP, parish EOC and other officials to prepare for potential impacts. Regional offices in potential landfall path initiate emergency action plans for their locations. The DEQ airplane is on standby, ready for use after landfall for aerial reconnaissance of the affected areas.

**Hurricane Watch** — when a hurricane warning is announced for a region [typically within 36 hours of landfall], the regional manager will implement the regional emergency action plan. Regional liaisons will notify the OEPs of any specific preparations or issues that may occur prior to or post-landfall and partner with LSP to prepare the rapid response teams. The regional manager notifies key regional personnel of their responsibilities pre and post-landfall. It is understood that the personal safety for regional staff and their families is of primary importance.

**Hurricane Landfall** – Staff remain in contact with LSP and other agencies to prepare for post-landfall rapid response assessment activities. Regional Managers or designees remain in contact with parish OEPs and other parish governmental entities in preparation for initial response and subsequent assessment efforts by regional staff and other agencies. Regional liaisons with the parish OEPs serve as point of contact to address specific needs/issues. Liaisons are available upon request. Additional assessment teams have been coordinated for the response effort.

### **RESPONSE**

**Post-Hurricane Landfall** – DEQ executive staff meets with essential staff on Day 0 to activate aerial reconnaissance and DEQ emergency response staff work closely with LSP as rapid response assessment teams to perform initial evaluations of impacted areas. Upon reporting back to UC environmental assessments begin.

DEQ performs environmental assessments - oil spill, hazardous material, and radiological group that include industrial, commercial. underground storage tank, and radiological source facilities. DEQ also performs environmental assessment according to ESF 8 - public health and medical services group, which are the wastewater (sewage treatment plants) and drinking water (potable water) facilities. The objective of performing environmental assessments is to determine if a facility has received any type of hurricane-related damage that may have caused or has the potential to cause an emergency condition such as a release, fire, or explosion. Assessment teams are equipped with air and water monitoring equipment to canvass a designated assessment area. Air monitoring sites are reactivated in impacted areas; water and soil samples are collected, as needed. DEQ works with other state and federal agencies to bring in additional sampling teams, as needed. Resources such as the EPA mobile air monitoring laboratory (TAGA) and EPA's ASPECT air recon aircraft are brought in for emergency situations as needed.







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- Aerial recon will identify most, if not all, hazmat that may keep citizens from re-entering
- State Police, Emergency Response, and DEQ surveillance on-the ground assessments will evaluate large chemical inventory facilities in impacted area
- DEQ and DHH/EPA will assess drinking water and wastewater sewer treatment facilities
- Local law enforcement and fire department personnel do drive-by visual assessments and report back to parish EOCs any areas of concern in residential and light commercial areas.
- LDEQ confers with GOHSEP and other agencies in the Unified Command Group, and GOHSEP notifies the parishes of findings that assist parishes with decisions as to when to allow residents to reenter. PIOs broadcast and provide handouts outlining potential risks for residents when re-entering damaged or contaminated areas.

### **POST-HURRICANE DEBRIS ACTIVITIES**

LDEQ works with other state agencies and the parishes to determine debris disposal sites before any storm activity. LDEQ personnel provide oversight at debris disposal sites. This is to ensure household hazardous waste, recyclables and other waste streams are disposed of properly. LDEQ pre-approves debris and staging sites selected by the parishes that meet the department's requirements.

#### LDEQ RADIATION RESPONSE

LDEQ has the lead for assessment and compliance of radiation issues. A separate procedure exists covering the response and confirmation of radioactive source materials before and after landfall. These tasks are performed by a separate group of specialists within LDEQ and should not hamper the efforts described above. LDEQ Radiological group is assisted by the Nuclear Regulatory Commission, Environmental Protection Agency, Federal Radiological Monitoring and Assessment Center, Southern Mutual Radiation Assistance Plan and Department of Energy with radiological issues.

### LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS

The State of Louisiana has standard procedures for assessing the conditions/status of water and wastewater systems and restoring water systems to safe operation.

- Before a hurricane makes landfall, personnel is mobilized and daily conference calls are initiated to coordinate activities.
- Immediately following a storm, staff begins calling all systems to assess their status. If an area is without power, the system is assumed to be on boil advisory until it is contacted by DHH and its loss of pressure status is obtained. The list of systems on boil advisory is updated daily for distribution to the media and various state and local agencies. In the event of a severe emergency, updates may be issued twice daily.
- Of critical note is the status of sewage system lift stations. If the lift station serving an area is not operational, it is STRONGLY recommended that residents be kept out of the area. Use of toilets and washing machines could cause the system to back-up and present a significant health risk. DHH officials, on both the local and state

levels, will be available to discuss the risks associated with disabled lift stations.

- Any public water system that is flooded or experiences loss of pressure will remain on boil advisory until released by DHH. DHH will not take action on a system until flooding has subsided and power is restored, either by generator or standard electricity. The system will notify DHH's Office of Public Health (OPH) once the necessary repairs have been completed, the system is back on line (has adequate pressure) and the pipelines have been flushed and sanitized. DHH-OPH will not restore a system to safe drinking water status until all floodwater is gone. Exceptions are made when a system can completely valve off the flooded areas, such as in lower Plaquemines Parish and Grand Isle.
- After the water system operators inform DHH that the system is ready for testing, an engineer or sanitarian will evaluate the system and collect investigative bacteriological samples. Depending on the lab results, the system is either removed from the list or investigated further.

Local officials should be aware that it could be days, weeks or even longer before a system is ready to be tested. Once testing can be done, results are normally available within 48 hours depending on the stress on the lab.

- Physical infrastructure damage, back-up equipment failure and salt-water contamination of systems near the Gulf are typically the greatest challenges for water systems.
- Because there are no intake systems in Lake Pontchartrain or near the coastline, and it is highly unlikely that domestic groundwater wells could be impacted by the oil, oil intrusion is not a major concern for public water systems. Nevertheless, DHH has worked with local water systems to allay oil intrusion fears and ensure it would not be an issue in the event of a hurricane.
- When a contaminant approaches an intake structure, standard protocol dictates that the public water system be shut down. In the event of a closure, the public is notified and the system implements booming procedures and treats any oil-related contaminants in the drinking water. In the event of an extreme emergency, most water systems are able to change intakes to a safer one upstream. All water systems along the impacted areas have been informed of these procedures and are well prepared to deal with an oil intrusion.
- DHH personnel will only enter hazardous areas once they have been cleared by DEQ's assessment teams. Once access is granted, regional and parish sanitarians will immediately begin assessing water systems and recording their findings; this happens even when communication with the central office, regional offices and each other is not possible.
- The water systems are responsible for contacting DHH and putting generators on line in areas where flooding has not occurred. Each water and wastewater system is required to have an alternative power source. In areas where flooding has occurred, the larger systems normally work to bring up enough pressure for firefighting until flooding has subsided. The smaller systems often wait until floodwaters subside.
- GOHSEP will respond to parish EOC directors' requests for bulk water and help facilitate requests for bottled water, generators, equipment and other items that are vital to the system's operations.

• DHH will provide assistance for domestic (private) wells through information bulleting it will also assist with sampling after the well system is repaired and flushed.

DEPARTMENT OF

HEALTH

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